Florida Gas Transmission Company
Compressor Station No. 16

Facility ID No. 0070012
Bradford County

Title V Air Operation Permit Revision

Permit No. 0070012-020-AV
(Revision of Title V Air Operation Permit No. 0070012-019-AV)

Permitting Authority:

State of Florida
Department of Environmental Protection
Northeast District Office
Waste and Air Resource Management
8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256

Telephone: (904) 256-1700
Fax: (904) 256-1590

Compliance Authority:

State of Florida
Department of Environmental Protection
Northeast District Office
Compliance Assurance
8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256

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Title V Air Operation Permit Revision

Permit No. 0070012-020-AV

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FLORIDA DEPARTMENT OF
Environmental Protection

Northeast District
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256

PERMITTEE:
Florida Gas Transmission Company
2405 Lucien Way, Suite 200
Maitland, Florida 32751-7047

Permit No. 0070012-020-AV
Compressor Station No. 16
Facility ID No. 0070012
Title V Air Operation Permit Revision

The purpose of this permit is to revise the Title V air operation permit for the above referenced facility to incorporate Air Construction Permit No. 0070012-016-AC that authorized construction of a new, non-emergency 5,000 bhp natural gas fired engine. The existing Florida Gas Transmission Company, Compressor Station No. 16 is located in Bradford County at 14369 SW State Road 231, Brooker, Florida. UTM Coordinates are: Zone 17, 371.98 km East and 3310.57 km North. Latitude is: 29.921111 North; and, Longitude is: -82.326111 West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

0070012-020-AV Effective Date: August 29, 2018
Renewal Application Due Date: January 16, 2023
Expiration Date: August 29, 2023

Executed in Jacksonville, Florida
STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Thomas G. Kallemeyn
Permitting Program Administrator

TGK/pr

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

Florida Gas Transmission Company (FGT) is a natural gas compression station. It operates seven natural gas (NG) fired Spark Ignition (SI) Reciprocating Internal Combustion Engines (RICE) and one NG fired combustion turbine.

Five RICE No. 1601, 1602, 1603, 1604, and 1605, are classified as EU 001. The five non-emergency SI four-stroke lean-burn (4SLB) NG fired Worthington manufactured engines, model SEHG-8 are rated at 2,000 bhp (each). One Internal Combustion Engine No. 1606 is identified as EU 002. This is a non-emergency SI two-stroke lean-burn (2SLB) NG fired Cooper-Bessemer manufactured engine model 8W-330-C2 and rated at 4,000 bhp. One combustion turbine No. 1607 identified as EU 003, manufactured by Cooper-Rolls 501-KC7 DLE is rated at 7,200 bhp. One Internal Combustion Engine identified as EU 006 is a non-emergency SI 4SLB NG fired Caterpillar engine and rated at 5,000 bhp.

One unregulated emergency engine is a SI 4SLB NG fired Waukesha model H24GL engine rated at 585 hp.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
001	Internal Combustion Engines No. 1601, 1602, 1603, 1604, and 1605. Five non-emergency SI 4SLB NG 2,000 hp (each) fired engines.
002	Internal Combustion Engine No. 1606. One non-emergency SI 2SLB NG fired engine.
003	NG fired 7,200 bhp combustion turbine No. 1607
006	Internal Combustion Engine No. 1608; NG fired 4SLB SI 5,000 bhp rated non-emergency engine; Caterpillar model G3616.
Unregulated Emissions Units and Activities (see Appendix U, List of Unregulated Emissions Units and/or Activities)	
004	One emergency SI 4SLB NG fired engine.

Also included in this permit are miscellaneous insignificant emissions units and/or activities (see Appendix I, List of Insignificant Emissions Units and/or Activities).

Subsection C. Applicable Regulations.

Based on the Title V air operation permit revision application received June 29, 2018, this facility is a major source of hazardous air pollutants (HAP). The existing facility is a prevention of significant deterioration (PSD) major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
Federal Rule Citations	
40 CFR 60, Subpart A, NSPS General Provisions	003, 006
40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines	003
40 CFR 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	006
40 CFR 63, Subpart A, NESHAP General Provisions	006
40 CFR 63, Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines	006
PSD BACT	002

State Rule Citations	
State Rule Citations (Rule 62-204.800, F.A.C., Federal Regulations Adopted by Reference)	002, 003, 006
State Rule Citations (Rule 62-210.200, F.A.C., PTE and Major Modification (EU 003))	001, 002, 003, 006
State Rule Citations (Rule 62-210.300, F.A.C., Permits Required)	002, 003
State Rule Citations (Rule 62-212.400, F.A.C., PSD)	002
State Rule Citations (Rule 62-213.440(1)(b)1.a., F.A.C., Compliance Assurance Monitoring)	006

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The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. **Not federally Enforceable.** Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

FW3. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]

{Permitting Note: Nothing is deemed necessary and ordered at this time.}

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b), F.A.C.]

FW5. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

a. Paving and maintenance of roads, parking areas, and yards.
b. Chemical (dust suppressants) or water application to:
   o Unpaved roads.
   o Unpaved yard areas.
c. Landscaping or planting of vegetation.
d. Confining abrasive blasting where possible.
e. Other techniques, as necessary.

[Rule 62-296.320(4)(c), F.A.C.; and, proposed by applicant in Title V air operation permit renewal application received February 1, 2018.]

Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

FW6. Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's (DEP) Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall

only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, Post Office Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/air/emission/tvfee.htm. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]

{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: http://www.dep.state.fl.us/air/emission/eaor. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}

{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. ***A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.****}*

FW7. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit and to the US. EPA at the address shown below within 60 days after the end of each calendar year during which the Title V air operation permit was effective. (See also Appendix RR, Conditions RR1 and RR7.) [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

U.S. Environmental Protection Agency, Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303
Attn: Air Enforcement Branch

FW8. Prevention of Accidental Releases (Section 112(r) of CAA). If, and when, the facility becomes subject to 112(r), the permittee shall:

a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent electronically through EPA's Central Data Exchange system at the following address: https://cdx.epa.gov. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: http://www2.epa.gov/rmp. The RMP Reporting Center can be contacted at: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.

b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

FW9. Semi-Annual Monitoring Reports. The permittee shall monitor compliance with the terms and conditions of this permit and shall submit reports of any deviations from the requirements of these conditions at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports, including reference to the specific requirement and the duration of such deviation. All reports shall be accompanied by a certification by a responsible official, pursuant to subsection 62-213.420(4), F.A.C. (See also Conditions RR2. – RR4. of Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements related to deviations.) [Rule 62-213.440(1)(b)3.a., F.A.C.]

{Permitting Note: EPA has clarified that, pursuant to 40 CFR 70.6(a)(3), the word "monitoring" is used in a broad sense and means monitoring (i.e., paying attention to) the compliance of the source with all emissions limitations, standards, and work practices specified in the permit.}

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The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
001	Internal Combustion Engines No. 1601, 1602, 1603, 1604, and 1605. Five non-emergency SI 4SLB 2,000 HP (each) NG fired engines.

Engines 1601, 1602 and 1603 commenced initial operation in 1958. Engines 1604 and 1605 commenced initial operation in 1966 and 1968 respectively.

{Permitting note(s): EU 001 was issued an operating permit as a result of a consent order. A construction permit did not exist before the operating permit. The initial operating permit was 0070012-001-AO (formerly AO 04-191312). EU 001is subject to 40 CFR 63, Subpart ZZZZ, NESHAPS for Stationary Reciprocating Internal Combustion Engines referenced in Rule 62-204.800, F.A.C. *In accordance with 40 CFR 63.6590(b)(3)(ii), this emissions unit does not have to meet the requirements (including notification requirements) of 40 CFR 63, Subpart ZZZZ, NESHAPS for Stationary Reciprocating Internal Combustion Engines or the requirements of 40 CFR 63, Subpart A, General Provisions.}*

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum heat input shall not exceed 131,400 MMBTU per rolling 12-month period for each engine (1601, 1602, 1603, 1604, and 1605). [Rule 62-210.200(PTE), F.A.C.; Initial Air Operation Permit No. 0070012-001-AO]

A.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]

A.3. Methods of Operation. Fuels. The fuel that is allowed to be burned in this emission unit is natural gas. [Rule 62-210.200(PTE), F.A.C.; Air Operation Permit No. 0070012-001-AO.]

A.4. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

A.5. Excess Emissions Allowed. Excess emissions resulting from startup or shutdown of any emissions unit shall be permitted provided (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

A.6. Excess Emissions Prohibited. Excess emissions that are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during any startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(1), F.A.C.]

{Permitting note: After May 22, 2020, subsections 62-210.700(1) and (2), F.A.C. shall not apply to emission limits in Chapter 62-296, F.A.C., that have been or that become incorporated into the State Implementation Plan for the State of Florida, identified in 40 C.F.R. §52.520; and unit-specific emission limits that have been or that become incorporated into the State Implementation Plan for the State of Florida, identified in 40 C.F.R. §52.520.}

Test Methods and Procedures

{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.7. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

A.8. Additional Compliance Test Requirements. For compliance testing purposes, the maximum heat input rate shall not exceed 15 MMBtu per hour for each engine.

{Permitting Note: The hourly heat input limitation has been included to identify the capacity of each unit, to establish a compliance testing operating rate and to aid in determining future rule applicability. The hourly heat input is not to be construed as an operating limit during normal operation}

[Rule 62-210.200(PTE), F.A.C.; Initial Air Operation Permit 0070012-001-AO]

Recordkeeping and Reporting Requirements

A.9. Recordkeeping. Records shall be maintained of the amount of natural gas fired. Rolling 12-month totals shall be maintained and made available on site for a minimum of five years for Department inspection. [Rule 62-210.200(PTE), F.A.C. and Initial Air Operation Permit 0070012-001-AO]

A.10. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

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The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
002	Internal Combustion Engine No. 1606. One non-emergency SI 2SLB NG fired engine.

Engine 1606 was issued a construction permit on May 10, 1991. This engine incorporates "lean burn" technology to minimize exhaust NO_x emissions.

{Permitting note(s): This emissions unit is subject to 40 CFR 63, Subpart ZZZZ, NESHAPS for Stationary Reciprocating Internal Combustion Engines. Pursuant to 40 CFR 63.6590(b)(3)(i), this emissions unit does not have to meet the requirements (including notification requirements) of 40 CFR 63, Subpart ZZZZ, NESHAPS for Stationary Reciprocating Internal Combustion Engines or the requirements of 40 CFR 63, Subpart A, General Provisions. Rule 212.400, F.A.C., Prevention of Significant Deterioration (PSD): Permit No. PSD-FL-160; Rule 62-212.400(4)(c), F.A.C., Best Available Control Technology (BACT) Determination, dated May 9, 1991.}

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity.

The maximum allowable heat input rate and natural gas consumption rate are as follows:

Unit No.	Heat Input	Consumption	Fuel Type
002	34.85 MMBtu/hr	33,833 scf/hr	Natural Gas

[Rule 62-210.200(PTE), F.A.C., Air Construction Permit No. AC04-189454 and subsequent revisions per correspondences that amended and increased the allowed heat input and fuel consumption.]

The maximum allowable operating rate (rated capacity) is 4,000 bhp (full speed, full load, 100°F ambient site temperature). Fluctuations in measured bhp, plus or minus ten percent (± 10%) may occur as a result of natural uncontrolled fluctuations in ambient temperature, ambient pressure, fuel temperature, and a pulsation phenomenon inherent to the operation of reciprocating compressor engines.

[Rule 62-210.200(PTE), F.A.C.; Comments received from FGT on September 29, 2008]

B.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]

B.3 Methods of Operation. Fuels. The fuel that is allowed to be burned in this emission unit is natural gas. [Rule 62-210.200(PTE), F.A.C.; Air Construction Permit No. AC04-189454]

B.4. Hours of Operation. The engine may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.; Air Construction Permit No. AC04-189454]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Unless otherwise specified, the averaging times for **Specific Condition Nos. B.5**, **B.6**, **B.7**, **B.8**, **B.9**, **B.10** and **B.11** below are based on the specified averaging time of the applicable test method.

B.5. Visible Emissions. Visible emissions shall not exceed 10% opacity. [Air Construction Permit No. AC04-189454]

B.6. CO Emissions. Carbon monoxide (CO) emissions shall not exceed 22.0 lb/hr (2.5 g/bhp-hr) and 96.6 tpy. [Air Construction Permit No. AC04-189454]

B.7. NO_X Emissions. Nitrogen oxide (NO_X) emissions shall not exceed 17.6 lb/hr (2.0 g/bhp-hr) and 77.3 tpy. [Air Construction Permit No. AC04-189454]

B.8. PM Emissions. Particulate matter (PM) emissions shall not exceed 1.68 lb/hr (0.04831 lb/MMscf) and 7.36 tpy. PM emissions are minimized by good combustion design with the firing of natural gas as the exclusive fuel. [Air Construction Permit No. 0070012-008-AC]

B.9. PM_{10} Emissions. Particulate matter less than 10 microns (PM_{10}) emissions shall not exceed 1.68 lb/hr (0.04831 lb/MMscf) and 7.36 tpy. PM_{10} emissions are minimized by good combustion design with the firing of natural gas as the exclusive fuel. [Air Construction Permit No. 0070012-008-AC]

B.10. SO_2 Emissions. Sulfur dioxide (SO_2) emissions shall not exceed 0.97 lb/hr (10 gr S/100 scf) and 4.2 tpy. [Air Construction Permit No. AC04-189454 and subsequent correspondences and Air Construction Permit No. 0070012-008-AC]

B.11. VOC Emissions. Volatile organic compounds (VOC) emissions shall not exceed 8.8 lb/hr (1.0 g/bhp-hr) and 38.6 tpy. Compliance with the VOC emissions limit is assumed if the CO allowable emissions rate is achieved. [Air Construction Permit No. AC04-189454]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

B.12. Excess Emissions Allowed. Excess emissions resulting from startup or shutdown of any emissions unit shall be permitted provided (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

B.13. Excess Emissions Prohibited. Excess emissions that are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during any startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(1), F.A.C.]

{Permitting note: After May 22, 2020, subsections 62-210.700(1) and (2), F.A.C. shall not apply to emission limits in Chapter 62-296, F.A.C., that have been or that become incorporated into the State Implementation Plan for the State of Florida, identified in 40 C.F.R. §52.520; and unit-specific emission limits that have been or that become incorporated into the State Implementation Plan for the State of Florida, identified in 40 C.F.R. §52.520.}

Test Methods and Procedures

{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

B.14. Test Methods. When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4 or 19	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Determination of Particulate Matter Emissions from Stationary Sources
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}
25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C.; Air Construction Permit No. AC04-189454]

B.15. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

B.16. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), EU 002 shall be tested to demonstrate compliance with the emissions standards for CO and NO_X. [Air Construction Permit No. AC04-189454]

EU 002 shall demonstrate compliance with the SO_2, VOC and PM/PM_{10} emission limits as follows:

a. SO_2. Compliance with the SO_2 emissions limit can be demonstrated by calculations based on fuel analysis using ASTM D1072-80, D3031-81, D4084-82, or D3246-81 for sulfur content of gaseous fuels. [Comments from Florida Gas Transmission Company received on May 30, 2013; Air Construction Permit No. AC04-189454]

b. VOC. A demonstration of compliance with the VOC emissions limit, Method 25A, is not required provided that the result of the CO compliance test is within the permitted limits for this pollutant. [Air Construction Permit No. AC04-189454]

c. PM/PM_{10}. A demonstration of compliance with the PM/PM_{10} emissions limit, Method 5, is required upon request of the Department. Good combustion design with the firing of natural gas as the exclusive fuel provides reasonable assurance of compliance with the PM/PM_{10} emissions limit. [Air Construction Permit No. 0070012-008-AC]

B.17. Compliance Tests Prior To Renewal. Except as provided in subparagraph 62-297.310(8)(b)3., F.A.C. (see condition **TR7.**b.(3) in Appendix TR – Facility-wide Testing Requirements), in addition to the annual compliance tests specified above, compliance tests shall also be conducted for visible emissions prior to obtaining a renewed operation permit to demonstrate compliance with the emission limits in **Specific Condition No. B.5** Appendix TR (Facility-wide Testing Requirements) specifies one-half (1/2) hour is the minimum accepted time period for conducting the VE compliance test. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. [Rules 62-210.300(2)(a), 62-297.310(5)(b), and 62-297.310(8)(b), F.A.C.]

{Permitting Note: Tests which are only required once during the term of a permit prior to obtaining a renewed permit should be performed roughly five years from the previous test.}

Recordkeeping and Reporting Requirements

B.18. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

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The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
003	NG fired 7,200 bhp combustion turbine No. 1607

{Permitting note(s): This emissions unit(s) is regulated under: New Source Performance Standards 40 CFR 60, Appendix A, General Provisions - adopted and incorporated by reference in Rule 62-204.800, F.A.C.; 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines - adopted by reference in Rule 62-204.800(7)(b), F.A.C. The requirements (including notification requirements) of 40 CFR 63, Subpart YYYY, NESHAPS for Stationary Combustion Turbines do not apply to this emission unit in accordance with 40 CFR 63.6090(b)(4)[i.e., existing stationary combustion turbines in all subcategories do not have to meet the requirements of this subpart and of subpart A of this part]. No initial notification is necessary for any existing stationary combustion turbine, even if a new or reconstructed turbine in the same category would require an initial notification.}

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity. The maximum allowable heat input rate to the gas turbine shall not exceed 68 million BTU per hour while producing approximately 7,200 bhp based on a compressor inlet air temperature of 59 º F, 100% load, and a higher heating value (HHV) of 1040 BTU per SCF for natural gas. Heat input rates vary depending upon gas turbine characteristics, load, and ambient conditions. [Rule 62-210.200(PTE), F.A.C.; Air Construction Permit Nos. 0070012-004-AC and 0070012-011-AC]

C.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]

C.3. Methods of Operation.

a. *Fuels.* The fuel that is allowed to be burned in this unit is pipeline-quality natural gas with a maximum of 10 grains of sulfur per 100 standard cubic feet of natural gas.

b. *Other*. Except for startup and shutdown, operation below 50% base load is prohibited.

[Rules 62-210.200(PTE), F.A.C.; Air Construction Permit Nos. 0070012-004-AC and 0070012-011-AC]

C.4. Hours of Operation. The engine may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.; Air Construction Permit No. 0070012-004-AC]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Unless otherwise specified, the averaging times for **Specific Condition Nos. C.5**, **C.6**, **C.7**, **C.8**, **C.9**, and **C.10** are based on the specified averaging time of the applicable test method.

C.5. Opacity. Opacity shall not exceed 10% opacity, 6-minutes average [A]. The opacity standard is a 6-minute average, as determined by EPA Method 9. [Air Construction Permit No. 0070012-004-AC; Avoids Rule 62-212.400, F.A.C.]

C.6. CO Emissions. Carbon monoxide (CO) emissions shall not exceed 50 ppmvd at 15% O_2 [A] (6.9 lb/hr [B] and 30.2 tpy [C]). The CO standard is based on 3-hour test averages as determined by EPA Method 10. [Air Construction Permit No. 0070012-004-AC; Avoids Rule 62-212.400, F.A.C.]

C.7. NO_X Emissions. Nitrogen oxide (NO_X) emissions shall not exceed 25 ppmvd at 15% O_2 [A] (5.6 lb/hr [B] and 24.5 tpy [C]). The NO_X standard is based on 3-hour test averages as determined by EPA Method 20. [Air Construction Permit No. 0070012-004-AC; Avoids Rule 62-212.400, F.A.C.]

{Permitting Note: This EU is also subject to an NSPS NO_X emissions limit of 190 ppmvd at 15% O_2 [40 CFR 60.332(a)(2)], which is 7.6 times less stringent than the 25 ppmvd at 15% O_2 NO_x emission limit that also applies. For this reason, the applicant requested and the Department agreed to omit the NSPS limit as a Specific Condition from the permit.}

C.8. PM Emissions. Particulate matter (PM) emissions are subject to good combustion practices.[AD] Equivalent maximum PM emissions are 0.45 lb/hr [B] and 2.0 tpy [C] based on using data in Table 3.1-2a in AP-42. [Air Construction Permit No. 0070012-011-AC; Avoids Rule 62-212.400, F.A.C.]

C.9. SO_2 Emissions. Sulfur dioxide (SO_2) emissions shall not exceed 10 grains of sulfur per 100 SCF of natural gas [A] (1.87 lb/hr [B] and 8.2 tpy [C]). The fuel sulfur emissions limit specification of 10 grains per 100 SCF is based on the maximum limit specified by Federal Emergency Regulatory Commission and effectively limits the potential SO_2 emissions. Expected fuel sulfur levels are less than 1 grain per 100 SCF of natural gas from the pipeline. [Air Construction Permit No. 0070012-011-AC; Avoids Rule 62-212.400, F.A.C.; 40 CFR 60.333; and Rule 62-204.800, F.A.C.]

C.10. VOC Emissions. Volatile organic compounds (VOC) emissions are subject to good combustion practices[A]. The efficient combustion of clean fuels is indicated by compliance with opacity and CO standards. Equivalent maximum VOC emissions are 0.2 lb/hr [B] and 0.9 tpy [C]. Regulated VOC emissions were conservatively assumed to be 10% of the manufacturer's estimated emissions for total hydrocarbons. [Air Construction Permit No. 0070012-004-AC; Avoids Rule 62-212.400, F.A.C.]

Footnotes

A - The emissions standards of this permit ensure that the project does not trigger the PSD preconstruction review requirements of Rule 62-212.400, F.A.C.

B – Equivalent maximum hourly emission rates are the maximum expected emissions based on permitted capacity and a compressor inlet air temperature of 59°F. For comparison purposes, the permittee shall provide a reference table with the initial compliance test report of mass emission rates verses the compressor inlet temperatures. For tests conducted at 59°F or greater, measured mass emission rates shall be compared to the equivalent maximum emissions above. For tests conducted below 59°F, measured mass emission rates shall be compared to the table mass emission rates provided by the manufacturer based on compressor inlet temperatures.

C – Equivalent maximum annual emissions are based on 8760 hours of operation per year.

D – PM/PM_{10} emissions are minimized by good combustion design with the firing of natural gas as the exclusive fuel.

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

C.11. Excess Emissions Allowed. Excess emissions resulting from startup or shutdown of any emissions unit shall be permitted provided (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

C.12. Excess Emissions Prohibited. Excess emissions that are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during any startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(1), F.A.C.]

{Permitting note: After May 22, 2020, subsections 62-210.700(1) and (2), F.A.C. shall not apply to emission limits in Chapter 62-296, F.A.C., that have been or that become incorporated into the State Implementation Plan for the State of Florida, identified in 40 C.F.R. §52.520; and unit-specific emission limits that have been or that become incorporated into the State Implementation Plan for the State of Florida, identified in 40 C.F.R. §52.520.}

Test Methods and Procedures

{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

C.13. Test Methods. When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
3a	Method 3A - Determination of Oxygen and Carbon Dioxide Concentrations in Emissions From Stationary Sources (Instrumental Analyzer Procedure)
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Gas Turbines

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C., Air Construction Permit Nos. 0070012-004-AC and 0070012-011-AC]

C.14. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

C.15. Annual Compliance Tests Required.

CO and NO_X. During each calendar year (January 1st to December 31st), EU 003 shall be tested to demonstrate compliance with the emissions standards for Carbon Monoxide (CO) and Nitrogen Oxides (NO_X) in **Specific Condition Nos. C.6** and **C.7**. CO and NO_X emissions shall be tested concurrently at permitted capacity. [Rule 62-297.310(8), F.A.C.; Air Construction Permit No. 0070012-004-AC]

SO_2. Mass emission rates for SO_2 shall be calculated based on actual fuel sulfur content and fuel flow rate. Compliance with the SO_2 emissions limit can be demonstrated by calculations based on fuel analysis using ASTM D1072-80, D3031-81, D4084-82, or D3246-81 for sulfur content of gaseous fuels. [Air Construction Permit No. 0070012-004-AC]

VOC and PM. VOC and PM emission limits are subject to good combustion practices. The efficient combustion of clean fuels is indicated by compliance with opacity and CO standards. [Air Construction Permit No. 0070012-004-AC]

C.16. Compliance Tests Prior To Renewal. Except as provided in subparagraph 62-297.310(8)(b)3., F.A.C. (see condition **TR7.**b.(3) in Appendix TR – Facility-wide Testing Requirements), in addition to the annual compliance tests specified above, compliance tests shall also be performed for opacity (visible emissions) prior to obtaining a renewed operation permit to demonstrate compliance with the opacity limit in **Specific Condition No. C.5** Appendix TR (Facility-wide Testing Requirements) specifies one-half (1/2) hour is the

minimum accepted time period for conducting the VE compliance test. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. [Rules 62-210.300(2)(a), 62-297.310(5)(b), and 62-297.310(8)(b), F.A.C.]

{Permitting Note: Tests which are only required once during the term of a permit prior to obtaining a renewed permit should be performed roughly five years from the previous test.}

C.17. Additional Compliance Test Requirements. NO_X emissions shall be corrected to ISO ambient atmospheric conditions and compared to the NSPS Subpart GG standard for each required test. For each test run, the test report shall indicate the natural gas firing rate (cubic feet per hour), heat input rate (mmBTU per hour), the power output (bhp), percent base load, and the inlet compressor temperature. [Rules 62-204.800 and 62-297.310(6), F.A.C.; 40 CFR 60.332]

Recordkeeping and Reporting Requirements

C.18. Records:

a. Using the automated gas turbine control system, the permittee shall monitor and record heat input (mmBTU), power output (bhp), and hours of operation for the gas turbine. If requested by the Department, the permittee shall be able to provide a summary of this information within at least ten days of such request. The information shall also be used for submittal of the required Annual Operating Report. [Air Construction Permit No. 0070012-004-AC]

b. All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2., F.A.C.]

C.19. Test Reports. Each test report shall include measured mass emission rates for CO, NO_X and SO_2. [Air Construction Permit No. 0070012-004-AC]

C.20. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

Other Requirements

C.21. Component Replacements. For the replacement of gas turbine components to facilitate prompt repair and return the unit to its original specifications, the permittee shall comply with the following notification and testing requirements.

a. Components shall only be replaced with functionally equivalent "like-kind" equipment. Replacement components may consist of improved or newer equipment, but such components shall not change operation or increase the capacity (heat input and power output rates) of the gas turbine. Replacement components that affect emissions shall be designed to achieve the emissions standards specified in all valid air permits and shall achieve these standards or better. After a component replacement, the gas turbine compressor engine remains subject to the standards of all valid air permits. [Rule 62-210.200(169), F.A.C.]

b. The permittee shall notify the Compliance Authority within seven days after beginning any replacement of the gas generator component of the compressor engine. Within seven days of first fire on a replacement gas generator, the permittee shall submit the following information to the Compliance Authority: date of first fire and certification from the vendor that the replacement gas generator is a functionally equivalent "like kind" component. The vendor certification shall also identify the make, model number, maximum heat input rate (MMBtu/hour), power output (bhp) at ISO conditions, and that the permitted emission rates are achievable with the replacement component. This notification may be made by letter, fax or email. A copy of the information shall be kept on site at the compressor station. Within 60 days of restarting the

unit after a gas generator replacement, the permittee shall conduct stack tests to demonstrate compliance with the applicable emission standards. The permittee shall notify the Compliance Authority in writing at least 15 days prior to conducting these tests. The permittee shall comply with all permit requirements for test notification, test methods, test procedures, and reporting. [Air Construction Permit No. 0070012-004-AC and Rules 62-4.130, 62-4.160(2),(6), and (15) and 62-297.310(9), F.A.C.]

c. After investigation and for good cause, the Department may require special compliance tests pursuant to Rule 62-297.310(8)(c), F.A.C. [Rule 62-297.310(8)(c), F.A.C.]

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The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
006	Internal Combustion Engine No. 1608; NG fired 4SLB SI 5,000 bhp rated non-emergency engine; Caterpillar model G3616.

This permit subsection addresses a new, non-emergency 5,000 hp engine regulated by NESHAP Subpart ZZZZ and NSPS Subpart JJJJ. The engine date of construction is 2016 and the startup of the non-emergency stationary RICE is 2017. The facility is a major source of Hazardous Air Pollutants (HAP).

{Permitting note(s): This emissions unit is regulated under: NSPS - 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines and NESHAP - 40 CFR 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. NSPS – 40 CFR 60, Subpart JJJJ and NESHAP – 40 CFR 63, Subpart ZZZZ are adopted and incorporated by reference in Rule 62-204.800, F.A.C. The manufacture guarantee for this engine does not meet the NSPS Subpart JJJJ requirements. An add-on oxidation catalyst is used to achieve the NSPS Subpart JJJJ emission standards and to achieve even lower emissions limits taken to avoid PSD requirements.}

The following table provides important details for this emissions unit:

Engine Brake HP	Date of Construction	Model Year	Primary Fuel	Type of Engine	Displacement liters/cylinder	Serial #	Date of last mod. or reconst.
5,000 HP	2016	2016	NG	Non-Emergency	21.2	Unknown	N/A

Applicability: This stationary RICE is classified by the NESHAP Subpart ZZZZ regulation as a new, non-emergency, 4SLB stationary RICE having a site rating of more than 500 hp located at a major source of HAPs. [40 CFR 63.6675(def); 40 CFR 63.6585(a) & (b); 40 CFR 60.6590(a)(2)(i); and Rule 62-204.800, F.A.C.]

Applicability: This stationary RICE is classified by the NSPS Subpart JJJJ regulation as a stationary SI engine that commenced construction after June 12, 2006. [40 CFR 60.4230(a)(4)(i); and Rule 62-204.800, F.A.C.]

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity. The natural gas fired engine has a nominal 5,000 brake horsepower mechanical output at 100 percent load (approximate design heat input rate is 39.0 MMBtu/hour equivalent to 37,500 cubic feet of natural gas per hour). [Air Construction Permit No. 0070012-016-AC]

D.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]

D.3. Methods of Operation. Fuels. The fuel that is allowed to be burned in the engine a part of this emission unit is natural gas. [Air Construction Permit No. 0070012-016-AC]

D.4. Hours of Operation. The engine may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.; Air Construction Permit No. 0070012-016-AC]

Control Technology

D.5. NO_X Emissions. To control oxides of nitrogen (NO_X) emissions, the permittee shall use lean burn technology to achieve at least the NO_X emissions standards specified in this permit within **Specific Condition No. D.10.** [Air Construction Permit No. 0070012-016-AC]

D.6. Carbon Monoxide and VOC. To control Carbon Monoxide (CO), formaldehyde (HCHO) - if applicable and Volatile Organic Compounds (VOC) emissions, the permittee shall operate the oxidation catalyst to

achieve at least the CO, HCHO (if applicable) and VOC emissions standards specified in **Specific Condition Nos. D.8.**, **D.9** and **D.11.** The oxidation catalyst shall be on line and functioning properly whenever the engine is in operation, including during engine startup and shutdown. [40 CFR 63.6605(b); Air Construction Permit No. 0070012-016-AC; and Rule 62-204.800, F.A.C.]

Operating Standards

D.7. Oxidation Catalyst Pressure Drop and Inlet Temperature, NESHAP Subpart ZZZZ.

a. The pressure drop across the catalyst shall not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the most recent performance test; and

b. The temperature of the stationary RICE exhaust at the catalyst inlet shall be greater than or equal to 450 °F and less than or equal to 1350 °F. Sources can petition the EPA pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

[40 CFR 63.6600(b) and Table 2b to 40 CFR 63 Subpart ZZZZ; and Rule 62-204.800, F.A.C.]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Unless otherwise specified, the averaging time(s) for **Specific Condition Nos. D.8.** through **D.5.** are based on the specified averaging time of the applicable test method.

D.8. CO Emissions.

a. CO emissions shall not exceed 2.0 g/bhp-hr (or 270 ppmvd at 15% O_2 if the stationary engine is a non-certified SI engine). The engine shall be operated and maintained such that it achieves the applicable emission standard over the entire life of the engine. The Permittee shall demonstrate compliance with this emission standard according to **Specific Condition No. D.15.a.** [40 CFR 60.4233(e), 60.4243(e) and 60.4234 and Table 1 to NSPS Subpart JJJJ; and Rule 62-204.800, F.A.C.]

b. CO emissions shall not exceed 1.5 g/bhp-hr. The Permittee shall demonstrate compliance with this emission standard according to **Specific Condition No. D.15.b.** [Application to Permit 0070012-016-AC, Emissions Limit adopted for PSD Avoidance]

D.9. CO or Formaldehyde Emissions. CO emissions shall be reduced by 93 percent or more or the concentration of formaldehyde in the stationary RICE exhaust shall be limited to 14 ppmvd or less at 15 percent O_2. [Table 2a to 40 CFR 63 Subpart ZZZZ; and Rule 62-204.800, F.A.C.]

D.10. NO_X Emissions.

a. NO_X emissions shall not exceed 1.0 g/bhp-hr (or 160 ppmvd at 15% O_2 if the stationary engine is a non-certified SI engine). The engine shall be operated and maintained such that it achieves this emission standard over the entire life of the engine. The Permittee shall demonstrate compliance with this emission standard according to **Specific Condition No. D.15.a.** [40 CFR 60.4233(e) and 60.4234 and Table 1 to NSPS Subpart JJJJ; and Rule 62-204.800, F.A.C.]

b. NO_X emissions shall not exceed 0.5 g/bhp-hr. The Permittee shall demonstrate compliance with this emission standard according to **Specific Condition No. D.15.b.** [Application to Permit 0070012-016-AC, Emissions Limit adopted for PSD Avoidance]

D.11. VOC Emissions.

a. Volatile Organic Compounds (VOC) emissions shall not exceed 0.7 g/bhp-hr (or 60 ppmvd at 15% O_2 if the stationary engine is a non-certified SI engine). Emissions of formaldehyde shall not be included for purpose of the VOC emission limit. The Permittee shall demonstrate compliance with this emission standard according to **Specific Condition No. D.15.a.** The engine (with the oxidation catalyst add-on control device) shall be operated and maintained such that it achieves this emission standard over the entire life of the engine. [40 CFR 60.4233(e) and 60.4234 and Table 1 to NSPS Subpart JJJJ; and Rule 62-204.800, F.A.C.].

b. VOC emissions excluding formaldehyde shall not exceed 0.6 g/bhp-hr. The Permittee shall demonstrate compliance with this emission standard according to **Specific Condition No. D.15.b.** [Correspondence with applicant, Emissions Limit adopted for PSD Avoidance]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of a NSPS, NESHAP or Acid Rain program provision.

D.12. Excess Emissions Allowed. Excess emissions resulting from startup or shutdown of any emissions unit shall be permitted provided (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer duration. Excess emissions that are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(1), F.A.C.]

{Permitting Note: Subsection 62-210.700(1), F.A.C. shall not apply to the VOC emission limit of 0.6 g/bhp-hr, because this VOC emissions limit was established after October 23, 2016.}

Monitoring of Operations:

D.13. CAM Plan. This emissions unit is subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(8)(c), F.A.C. [40 CFR 64; Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

{Permitting Note: EU 006 "plan" requirements are as follows. EU 006 is subject to the CAM plan of **Specific Condition No. D.7.** above, the site-specific monitoring plan requirements in **Specific Condition No. D.8.a.** below, and the maintenance plan requirements of **Specific Condition No. D.15.a.** Maintenance plan requirements apply as EU 006 is a non-certified NSPS Subpart JJJJ engine.}

Continuous Monitoring System Requirements:

D.14. Continuous Parameter Monitoring System, NESHAP Subpart ZZZZ.

The Permittee is required to install, operate, and maintain a continuous parameter monitoring system (CPMS) as specified in Table 5 of 40 CFR 63 Subpart ZZZZ according to the requirements below.

a. A site-specific monitoring plan shall be prepared that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in **paragraphs (1) through (5)** below and in 40 CFR 63.8(d). As specified in 40 CFR 63.8(f)(4), the Permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in this section in the site-specific monitoring plan.

(1) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

(2) Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;

(3) Equipment performance evaluations, system accuracy audits, or other audit procedures;

(4) Ongoing operation and maintenance procedures in accordance with provisions in 40 CFR 63.8(c)(1)(ii) and (c)(3);

(a) The Permittee shall keep the necessary parts for routine repairs of the affected CMS equipment readily available. [40 CFR 63.8(c)(1)(ii)]

(b) All CMS shall be installed, operational, and the data verified as specified in the relevant standard either prior to or in conjunction with conducting performance tests under 40 CFR 63.7. Verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system. [40 CFR 63.8(c)(3)]

(5) Ongoing reporting and recordkeeping procedures in accordance with provisions in 40 CFR 63.10(c) and (e)(2)(i):

(a) The Permittee shall maintain records of:

i. All required CMS measurements (including monitoring data recorded during unavoidable CMS breakdowns and out-of-control periods);
ii. The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks;
iii. The date and time identifying each period during which the CMS was out of control, as defined in 40 CFR 63.8(c)(7);
iv. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during startups, shutdowns, and malfunctions of the affected source;
v. The specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during periods other than startups, shutdowns, and malfunctions of the affected source;
vi. The nature and cause of any malfunction (if known);
vii. The corrective action taken or preventive measures adopted;
viii. The nature of the repairs or adjustments to the CMS that was inoperative or out of control;
ix. The total process operating time during the reporting period; and
x. All procedures that are part of a quality control program developed and implemented for CMS under 40 CFR 63.8(d).
xi. In order to satisfy the requirements of **paragraphs vi. through viii.** and to avoid duplicative recordkeeping efforts, the Permittee may use the affected source's startup, shutdown, and malfunction plan or records kept to satisfy the recordkeeping requirements of the startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e), provided that such plan and records adequately address the requirements of **paragraphs vi. through viii.**

[40 CFR 63.10(c)]

(b) The Permittee shall furnish the Compliance Authority a copy of the written report of the results of the CMS performance evaluation, as required under 40 CFR 63.8(e), simultaneously with the

results of the performance test required under 40 CFR 63.7, unless otherwise specified in the relevant standard. [40 CFR 63.10(e)(2)(i)]

[40 CFR 63.6625(b)(1); and Rule 62-204.800, F.A.C.]

b. The Permittee shall install, operate, and maintain the CPMS in continuous operation according to the procedures in the Permittee site-specific monitoring plan. [40 CFR 63.6625(b)(2); and Rule 62-204.800, F.A.C.]

c. The CPMS shall collect data at least once every 15 minutes (see also **paragraphs e.** and **f.** from 40 CFR 63.6635). [40 CFR 63.6625(b)(3); and Rule 62-204.800, F.A.C.]

d. For a CPMS for measuring temperature range, the temperature sensor shall have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger. [40 CFR 63.6625(b)(4); and Rule 62-204.800, F.A.C.]

e. At least annually, a test of the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures as specified in the Permittee site-specific monitoring plan shall be conducted. The performance evaluation shall be done in accordance with the site-specific monitoring plan. [40 CFR 63.6625(b)(5); and Rule 62-204.800, F.A.C.]

f. Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, EU 006 shall be monitored continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [40 CFR 63.6635(b); and Rule 62-204.800, F.A.C.]

g. No data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall be used in data averages and calculations used to report emission or operating levels. The Permittee shall, however, use all the valid data collected during all other periods. [40 CFR 63.6635(c); and Rule 62-204.800, F.A.C.]

D.15. Temperature and Pressure Drop Monitoring, NESHAP Subpart ZZZZ.

a. Sub-daily Testing. The temperature data at the catalyst control device inlet collected according to **Specific Condition No. D.8.a. through d.** (40 CFR 63.6625(b)) is to be reduced to 4-hour rolling averages and compared for continuous compliance with the operating temperature limits in **Specific Condition No. D.7.b.** [40 CFR 63.6640 and Table 6 to Subpart ZZZZ; and Rule 62-204.800, F.A.C.]

b. Monthly Testing. During each month (and EPA interprets this to be "calendar month"), the EU 006 pressure drop between the catalyst control device inlet and outlet shall be compared to demonstrate compliance with the pressure drop operating limit established during the most recent performance test in **Specific Condition No. D.12.** [40 CFR 63.6640 and Table 6 to Subpart ZZZZ; and Rule 62-204.800, F.A.C.]

Test Methods and Procedures

{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

D.16. Test Methods. When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content

Method	Description of Method and Comments
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)

The above methods are described in 40 CFR 60, Appendix A, and/or Table 4 to Subpart ZZZZ of 40 CFR 63 adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C.]

D.17. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

D.18. Initial Compliance Test. Within 180 days of the startup of the unit and according to the provisions in 40 CFR 63.7(a)(2), EU 006 shall be tested according to the requirements specified in **Specific Condition No. D.16.** to:

a. Demonstrate the average emission reduction of carbon monoxide between the catalyst control device inlet and outlet or the formaldehyde concentration at the catalyst control device outlet complies with **Specific Condition No. D.3.**

b. Record the pressure drop between the catalyst control device inlet and outlet needed to utilize **Specific Condition No. D.7.a.**

c. Demonstrate the CPMS is installed and operating and the CPMS exhaust gas temperature at the catalyst control device inlet complies with **Specific Condition No. D.7.b.**

[40 CFR 63.6595(a)(3), 40 CFR 63.6610(a), 40 CFR 63.6630 and Table 5 to 40 CFR 63 Subpart ZZZZ; and Rule 62-204.800, F.A.C.]

D.19. Semi-Annual Compliance Tests. Semiannually, the EU 006 CO emission reduction between the catalyst control device inlet and outlet or formaldehyde concentration at the catalyst device outlet shall be tested for compliance with the CO percent reduction or formaldehyde concentration limit in **Specific Condition No. D.3.** according to the requirements specified in **Specific Condition No. D.16.** After EU 006 has demonstrated compliance for two consecutive tests, the frequency of subsequent performance tests may be reduced to annually. If the results of any subsequent annual performance test indicate EU 006 is not in compliance with the CO or formaldehyde emission limitation listed in **Specific Condition No. D.3.**, or the unit deviates from any of the operating limitations in **Specific Condition No. D.7.**, the EU 006 shall resume semiannual performance tests. [40 CFR 63.6615, 40 CFR 63.6640, and Table 3 and Table 6 to 40 CFR 63 Subpart ZZZZ; and Rule 62-204.800, F.A.C.]

D.20. Change or Reactivation of Catalyst. As soon as possible and within 180 days of a change or reactivation of the catalyst in the control device, EU 006 shall be tested according to the requirements specified in **Specific Condition No. D.16.** to:

a. Demonstrate the average emission reduction of carbon monoxide between the catalyst control device inlet and outlet or the formaldehyde concentration at the catalyst control device outlet complies with **Specific Condition No. D.3.**

b. Record the pressure drop between the catalyst control device inlet and outlet needed to utilize **Specific Condition No. D.7.a.**

c. Demonstrate the CPMS is installed and operating and the CPMS exhaust gas temperature at the catalyst control device inlet complies with **Specific Condition No. D.7.b.**

[Rule 62-4.070, F.A.C.]

D.21. Periodic Compliance Test.

a. Emission Limits, NSPS Subpart JJJJ Limits.

EU 006 is a non-certified engine that requires testing to demonstrate compliance with the CO, NO_X and VOC emission standards of NSPS Subpart JJJJ specified in **Specific Condition Nos. D.2a.**, **D.4.a.**, and **D.5.a.** Testing shall be conducted according to the requirements specified in **Specific Condition No. D.17.** and the permittee shall keep a maintenance plan and records of conducted maintenance for the unit and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test and conduct subsequent performance testing every 8,760 hours of operation or 3 years, whichever comes first. [40 CFR 60.4243; and Rule 62-204.800, F.A.C.]

b. Emission Limits, PSD Avoidance Limits. EU 006 shall be tested annually (January 1 – December 31) to demonstrate compliance with the PSD avoidance CO, NO_X, and VOC emission limits specified in **Specific Condition Nos. D.2.b.**, **D.4.b.**, and **D.5.b.** Testing shall be conducted according to the requirements specified in **Specific Condition No. D.17.** [Rule 62.297-310, F.A.C.]

D.22. Performance Test Requirements, NESHAP Subpart ZZZZ.

a. The Permittee shall comply with either the requirement to reduce CO emissions or limit the concentration of formaldehyde for performance tests of EU 006 as detailed below.

Complying with the requirement to . . .	You shall . . .	Using . . .	According to the following requirements . . .
reduce CO emissions	i. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and		For CO and O_2 measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.
	ii. Measure the O_2 at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005)* (heated probe not necessary)	Measurements to determine O_2 shall be made at the same time as the measurements for CO concentration.
	iii. Measure the CO at the inlet and the outlet of the control device	(1) ASTM D6522-00 (Reapproved 2005)* (heated probe not necessary) or Method 10 of 40 CFR part 60 , appendix A-4	The CO concentration shall be at 15 percent O_2, dry basis.
limit the concentra-tion of	i. Select the sampling port location and the		For formaldehyde, CO, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in

formalde-hyde in the stationary RICE exhaust	number/location of traverse points at the exhaust of the stationary RICE; and		diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A. If using a control device, the sampling site shall be located at the outlet of the control device.
	ii. Determine the O_2 concentration of the stationary RICE exhaust at the sampling port location; and	Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005) * (heated probe not necessary)	Measurements to determine O_2 concentration shall be made at the same time and location as the measurements for formaldehyde or CO concentration.
	iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and	Method 4 of 40 CFR part 60, appendix A-3, or Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 *	Measurements to determine moisture content shall be made at the same time and location as the measurements for formaldehyde or CO concentration.
	iv. Measure formaldehyde at the exhaust of the stationary RICE; or	Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03 *, provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R shall be greater than or equal to 70 and less than or equal to 130	Formaldehyde concentration shall be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

* The Permittee may also use Methods 3A and 10 as options to ASTM-D6522-00 (2005).

[40 CFR 63.6620 and Table 4 to 40 CFR 63 Subpart ZZZZ; and Rule 62-204.800, F.A.C.]

b. Each performance test shall be conducted within 10 percent of 100 percent peak load and according to the requirements in **Specific Condition No. D.2.D.2.a.** (Table 4 of Subpart ZZZZ).

c. Three separate test runs shall be conducted for each performance test required, as specified in 40 CFR 63.7(e)(3). Each test run shall last at least 1 hour.

d. To determine compliance with the CO percent reduction requirement, the following Equation 1 shall be used:

$$\frac{C_i - C_o}{C_i} \quad x \quad 100 \quad = \quad R \qquad (Eq. \quad 1)$$

Where:

C_i = concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet,
C_o = concentration of CO, THC, or formaldehyde at the control device outlet, and
R = percent reduction of CO, THC, or formaldehyde emissions.

e. The CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device shall be normalized to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen and the CO_2 concentration is measured

in lieu of oxygen concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in Equations 2-4 below of this section.

f. Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and Equation 2 below:

$$F_o = \frac{0.209 \quad F_d}{F_c} \quad (Eq. \quad 2)$$

Where:
F_o = Fuel factor based on the ratio of oxygen volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.
0.209 = Fraction of air that is oxygen, percent/100.
F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm3 /J (dscf/106 Btu).
F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm3 /J (dscf/106 Btu)

g. Calculate the CO_2 correction factor for correcting measurement data to 15 percent O_2, as follows:

$$X_{CO2} = \frac{5.9}{F_o} \quad (Eq. \quad 3)$$

Where:
X_{CO2} = CO_2 correction factor, percent.
5.9 = 20.9 percent O_2 - 15 percent O_2, the defined O_2 correction value, percent.

h. Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

$$X_{adj} = C_d \quad \frac{X_{CO2}}{\%CO_2} \quad (Eq. \quad 4)$$

Where:
C_{adj} = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O_2.
C_d = Measured concentration of CO, THC, or formaldehyde, uncorrected.
X_{CO2} = CO_2 correction factor, percent.
$\%CO_2$ = Measured CO_2 concentration measured, dry basis, percent.

i. The engine percent load during a performance test shall be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination shall be included in the notification of compliance status. The following information shall be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test shall be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value shall be provided.

[40 CFR 63.6620; and Rule 62-204.800, F.A.C.]

D.23. Performance Test Requirements, NSPS Subpart JJJJ.

a. Performance Test Procedures:

(1) Each performance test shall be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in 40 CFR 60.8 and under the specific conditions that are specified in **Specific Condition No. D.2.b.**

(2) Performance tests during periods of startup, shutdown, or malfunction are not allowed, as specified in 40 CFR 60.8(c). If the stationary SI internal combustion engine is non-operational, it is not necessary to startup the engine solely to conduct a performance test; however, the performance test shall be conducted immediately upon startup of the engine.

(3) Three separate test runs shall be conducted for each performance test required, as specified in 40 CFR 60.8(f). Each test run shall be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.

(4) To determine compliance with the NO_x mass per unit output emission limitation, the concentration of NO_x in the engine exhaust should be converted using Equation 5, below:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{HP - hr} \quad (Eq. 5)$$

Where:
ER = Emission rate of NO_X in g/HP-hr.
C_d = Measured NO_X concentration in parts per million by volume (ppmv).
1.912×10^{-3} = Conversion constant for ppm NO_X to grams per standard cubic meter at 20 degrees Celsius.
Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.
T = Time of test run, in hours.
HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

(5) To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 6:

$$ER = \frac{C_d \times 1.164 \times 10^{-3} \times Q \times T}{HP - hr} \quad (Eq. 6)$$

Where:
ER = Emission rate of CO in g/HP-hr.
C_d = Measured CO concentration in ppmv.
1.164×10^{-3} = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.
Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.
T = Time of test run, in hours.
HP-hr = Brake work of the engine, in HP-hr.

(6) When calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 7:

$$ER = \frac{C_d \times 1.833 \times 10^{-3} \times Q \times T}{HP - hr} \quad (Eq. 7)$$

Where:
ER = Emission rate of VOC in g/HP-hr.
C_d = VOC concentration measured as propane in ppmv.

1.833×10^{-3} = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.
Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.
T = Time of test run, in hours.
HP-hr = Brake work of the engine, in HP-hr.

(7) If the Permittee chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 8 and 9 of this condition. The corrected VOC concentration can then be placed on a propane basis using Equation 10.

$$RF_i = \frac{C_{M\,i}}{C_{A\,i}} \quad (Eq.\ 8)$$

Where:
RF_i = Response factor of compound i when measured with EPA Method 25A.
$C_{M\,i}$ = Measured concentration of compound i in ppmv as carbon.
$C_{A\,i}$ = True concentration of compound i in ppmv as carbon.

$$C_{i\,corr} = RF_i \ x \ C_{i\,meas} \quad (Eq.\ 9)$$

Where:
$C_{i\,corr}$ = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.
$C_{i\,meas}$ = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{Peq} = 0.6098 \ x \ C_{i\,corr} \quad (Eq.\ 10)$$

Where:
C_{Peq} = Concentration of compound i in mg of propane equivalent per DSCM.

[40 CFR 60.4244; and Rule 62-204.800, F.A.C.]

b. Requirements for Performance Tests within 10 percent of 100 percent peak (or the highest achievable) load, Table 2 to Subpart JJJJ of Part 60:

Complying with the requirement to	You shall	Using	According to the following requirements
a. limit the concentration of NO_X in the stationary SI internal combustion engine exhaust.	i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal combustion engine;	(1) Method 1 or 1A of 40 CFR part 60, appendix A-1, if measuring flow rate	(a) Alternatively, for NO_X, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, Appendix A, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, Appendix A.
	ii. Determine the O_2	(2) Method 3, 3A, or 3B[b]	(b) Measurements to determine O_2 concentration shall be

	concentration of the stationary internal combustion engine exhaust at the sampling port location;	of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00 (Reapproved 2005)[ae]	made at the same time as the measurements for NO_X concentration.
	iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 2C of 40 CFR part 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7	
	iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03[e]	(c) Measurements to determine moisture shall be made at the same time as the measurement for NO_X concentration.
	v. Measure NO_X at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site shall be located at the outlet of the control device.	(5) Method 7E of 40 CFR part 60, appendix A-4, ASTM Method D6522-00 (Reapproved 2005)[ae], Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03[e]	(d) Results of this test consist of the average of the three 1-hour or longer runs.
b. limit the concentration of CO in the stationary SI internal combustion engine exhaust.	i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal combustion engine;	(1) Method 1 or 1A of 40 CFR part 60, appendix A-1, if measuring flow rate	(a) Alternatively, for CO, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, Appendix A, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, Appendix A.
	ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B[b] of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00 (Reapproved 2005)[ae]	(b) Measurements to determine O_2 concentration shall be made at the same time as the measurements for CO concentration.
	iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 2C of 40 CFR part 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7	
	iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03[e]	(c) Measurements to determine moisture shall be made at the same time as the measurement for CO concentration.
	v. Measure CO at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site shall be located at the outlet of the control device.	(5) Method 10 of 40 CFR part 60, appendix A4, ASTM Method D6522-00 (Reapproved 2005)[ae], Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03[e]	(d) Results of this test consist of the average of the three 1-hour or longer runs.
c. limit the	i. Select the sampling port	(1) Method 1 or 1A of 40	(a) Alternatively, for VOC, O_2, and moisture

concentration of VOC in the stationary SI internal combustion engine exhaust	location and the number/location of traverse points at the exhaust of the stationary internal combustion engine;	CFR part 60, appendix A-1, if measuring flow rate	measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, Appendix A, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, Appendix A.
	ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B[b] of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00 (Reapproved 2005)[ae]	(b) Measurements to determine O_2 concentration shall be made at the same time as the measurements for VOC concentration.
	iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 2C of 40 CFR part 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7	
	iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03[e]	(c) Measurements to determine moisture shall be made at the same time as the measurement for VOC concentration.
	v. Measure VOC at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site shall be located at the outlet of the control device.	(5) Methods 25A and 18 of 40 CFR part 60, appendices A-6 and A-7, Method 25A with the use of a methane cutter as described in 40 CFR 1065.265, Method 18 of 40 CFR part 60, appendix A-6[cd], Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03[e]	(d) Results of this test consist of the average of the three 1-hour or longer runs.

[a] You may petition the Administrator for approval to use alternative methods for portable analyzer.

[b] You may use ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses, for measuring the O_2content of the exhaust gas as an alternative to EPA Method 3B.

[c] You may use EPA Method 18 of 40 CFR part 60, appendix A-6, provided that you conduct an adequate pre-survey test prior to the emissions test, such as the one described in OTM 11 on EPA's Web site (http://www.epa.gov/ttn/emc/prelim/otm11.pdf).

[d] You may use ASTM D6420-99 (2004), Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography/Mass Spectrometry as an alternative to EPA Method 18 for measuring total nonmethane organic.

[e] Incorporated by reference, see 40 CFR 60.17.

[Table 2 to 40 CFR 60 Subpart JJJJ; and Rule 62-204.800, F.A.C.]

Recordkeeping and Reporting Requirements

D.24. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Initial Notification, NESHAP Subpart ZZZZ	120 days after the unit becomes subject to this subpart	The Permittee shall submit an initial notification not later than 120 days after the unit becomes subject to this subpart. [40 CFR 63.6645(c)]
Performance Test Notification, NESHAP Subpart ZZZZ	60 days before each required performance test	A Notification of Intent to conduct a performance test shall be submitted at least 60 days before each required performance test as required in 40 CFR 63.7(b)(1). [40 CFR 63.6645(g)]
Notifications, NESHAP Subpart ZZZZ	By the dates specified	The Permittee shall submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply by the dates specified. [40 CFR 63.6645(a)]
Notification of Compliance Status, NESHAP Subpart ZZZZ	30 days, if no performance test, and 60 days if a performance test	The Permittee shall submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii): (1) For each initial compliance demonstration required in Table 5 to Subpart ZZZZ that does not include a performance test, the Notification of Compliance Status, including the results of the initial compliance demonstration, shall be submitted before the close of business on the 30th day following the completion of the initial compliance demonstration. (2) For each initial compliance demonstration required in Table 5 to Subpart ZZZZ that includes a performance test conducted according to the requirements in Table 3 to this subpart, the Notification of Compliance Status, including the performance test results, shall be submitted before the close of business on the 45th day following the completion of the performance test according to 40 CFR 63.10(d)(2). [40 CFR 63.6630(c) and 40 CFR 63.6645(h)]
Compliance Report, NESHAP Subpart ZZZZ	Semiannually according to 40 CFR	The report shall contain…
	63.6650(b)(1)-(5)	If there are no deviations from any emission limitations or operating limitations that apply, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period; or [Table 7 to 40 CFR 63 Subpart ZZZZ]
	63.6650(b)	If there were any deviations from any emission limitation or operating limitation during the reporting period, the information in 40 CFR 63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in 40 CFR 63.8(c)(7), the information in 40 CFR 63.6650(e); or [Table 7 to 40 CFR 63 Subpart ZZZZ]
	63.6650(b)	If there was a malfunction during the reporting period, the information in 40 CFR 63.6650(c)(4). [Table 7 to 40 CFR 63 Subpart ZZZZ]
	63.6650(c)	The Compliance report shall contain the information in paragraphs (c)(1) through (6) of this section. (1) Company name and address. (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

		(3) Date of report and beginning and ending dates of the reporting period. (4) If you had a malfunction during the reporting period, the compliance report shall include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report shall also include a description of actions taken by a Permittee during a malfunction of an affected source to minimize emissions in accordance with § 63.6605(b), including actions taken to correct a malfunction. (5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period. (6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period. [40 CFR 63.6650(c)]
	63.6650(e)	(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you shall also include the information in paragraphs (1) through (12) below. (1) The date and time that each malfunction started and stopped. (2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks. (3) The date, time, and duration that each CMS was out-of-control, including the information in § 63.8(c)(8). (4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period. (5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period. (6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes. (7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period. (8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE. (9) A brief description of the stationary RICE. (10) A brief description of the CMS. (11) The date of the latest CMS certification or audit. (12) A description of any changes in CMS, processes, or controls since the last reporting period. [40 CFR 63.6650(e)]
Initial Notification, NSPS Subpart JJJJ	40 CFR 60.4245(c)	The Permittee of a stationary SI ICE greater than or equal to 500 HP that has not been certified by an engine manufacturer to meet the emission standards in 40 CFR 60.4231 shall submit an initial notification as required in 40 CFR 60.7(a)(1). The notification shall include the information in (1) through (5) below. (1) Name and address of the owner or operator; (2) The address of the affected source; (3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

		(4) Emission control equipment; and (5) Fuel used. [40 CFR 60.4245(c)]
Performance Test, NSPS Subpart JJJJ	Within 45 days after the performance test. 40 CFR 60.4245(d)	The Permittee of stationary SI ICE that are subject to performance testing shall submit a copy of each performance test as conducted in 40 CFR 60.4244 within 45 days after the test has been completed. Performance test reports using EPA Method 18, EPA Method 320, or ASTM D6348-03 (incorporated by reference—see 40 CFR 60.17) to measure VOC require reporting of all QA/QC data. For Method 18, report results from sections 8.4 and 11.1.1.4; for Method 320, report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all QA/QC procedures in Annexes 1-7. [40 CFR 60.4245(d) and Rule 62-297.310(10), F.A.C.]

D.25. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

D.26. Deviation Reporting Requirements.

Each facility that has obtained a Title V operating permit pursuant to 40 CFR part 70 or 71 shall report all deviations as defined in NESHAP Subpart ZZZZ in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected facility submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in NESHAP Subpart ZZZZ, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. [40 CFR 63.6650(f); and Rule 62-204.800, F.A.C.]

D.27. Recordkeeping Requirements, NESHAP Subpart ZZZZ. The Permittee shall comply with the following recordkeeping requirements.

a. The Permittee shall keep the records described in **paragraphs a.(1) through a.(5)** below.

(1) A copy of each notification and report that is submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that is submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv), which requires documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.

(2) Records of the occurrence and duration of each malfunction of operation (*i.e.,* process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii), which requires all results of performance tests, CMS performance evaluations, and opacity and visible emission observations.

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with **Specific Condition No. D.8.c.** (40 CFR 63.6605(b)), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

b. For each CPMS (see **Specific Condition No. D.8.**), the Permittee shall keep the records listed in **paragraphs b.(1) through b.(3)** of this section.

(1) Records described in 40 CFR 63.10(b)(2)(vi) through (xi).

(2) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CPMS as required in 40 CFR 63.8(f)(6)(i), if applicable.

c. The Permittee shall keep the records required in Table 6 to NESHAP Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies.

[40 CFR 63.6655; and Rule 62-204.800, F.A.C.]

d. Records shall be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

e. As specified in 40 CFR 63.10(b)(1), records shall be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

f. Records shall be readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

[40 CFR 63.6660; and Rule 62-204.800, F.A.C.]

D.28. Recordkeeping Requirements, NSPS Subpart JJJJ. The Permittee shall comply with the following recordkeeping requirements.

a. All notifications submitted to comply with NSPS Subpart JJJJ and all documentation supporting any notification.

b. Maintenance conducted on the engine.

c. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.

d. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to **Specific Condition No. D.15.a.** (40 CFR 60.4243(a)(2)), documentation that the engine meets the emission standards.

[40 CFR 60.4245; and Rule 62-204.800, F.A.C.]

Other Requirements

D.29. Compliance with Emission Limitations, Operating Limitations, and Other Requirements, NESHAP Subpart ZZZZ.

a. If the EU 006 catalyst is changed, the Permittee shall reestablish the values of the operating parameters measured during the initial performance test of **Specific Condition Nos. D.12.b.** and **D.12.c.** At the time the operating parameter values are reestablished, a performance test(s) is required to demonstrate that EU 006 meets the required emission limitation(s) of **Specific Condition No. D.3.** that applies. [40 CFR 63.6640; and Rule 62-204.800, F.A.C.]

b. The Permittee shall be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply at all times. For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. [40 CFR 63.6605(a) and 40 CFR 63.6640(d); and Rule 62-204.800, F.A.C.]

c. At all times, the Permittee shall operate and maintain the affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require any further efforts to reduce emissions if levels required by this standard (and any adopted lower permit limits) have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Compliance Authority which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b); Air Construction Permit Application No. 0070012-016-AC PSD avoidance emission limits]

d. Minimize the engine's time spent at idle and minimize the time the engine's time during startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply. [Table 2a to Subpart ZZZZ; and Rule 62-204.800, F.A.C.]

D.30. Compliance Requirements, PSD Avoidance Limits. If the EU 006 catalyst is changed and after investigation and for good cause, the Department may require special compliance tests to reestablish that EU 006 complies with the NSPS Subpart JJJJ and PSD Avoidance emission limitation(s) of **Specific Condition Nos. D.2.**, **D.4.**, and **D.5.** [Rule 62-297.310(8)(c), F.A.C.]

D.31. Definitions, NESHAP Subpart ZZZZ. The definitions that apply to NESHAP Subpart ZZZZ regulations in this subsection include those appearing in 40 CFR 63.6675. *Refer to Appendix*. [40 CFR 63.6675; and Rule 62-204.800, F.A.C.]

D.32. General Provisions, NESHAP Subpart ZZZZ. Table 8 of 40 CFR 63 NESHAP Subpart ZZZZ shows which parts of the General provisions in 40 CFR 63.1 through 40 CFR 63.15 apply to engines subject to the requirements of NESHAP Subpart ZZZZ. *Refer to Appendix*. [40 CFR 63.6665 and Table 3 to NESHAP Subpart ZZZZ; and Rule 62-204.800, F.A.C.]

D.33. Definitions, NSPS Subpart JJJJ. The definitions that apply to NSPS Subpart JJJJ regulations include those appearing in 40 CFR 60.4248. *Refer to Appendix*. [40 CFR 60.4248; and Rule 62-204.800, F.A.C.]

D.34. General Provisions, NSPS Subpart JJJJ. Table 3 to 40 CFR 60 Subpart JJJJ shows which parts of the NSPS General Provisions in 40 CFR 60.1 through 40 CFR 60.19 are applicable to engines subject to the requirements of NSPS Subpart JJJJ. *Refer to Appendix*. [40 CFR 60.4246; and Rule 62-204.800, F.A.C.]

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